



Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural
Statistics Service

1435 Win Hentschel Blvd.
Suite B105

West Lafayette, IN 47906-4145
(765) 494-8371

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CROP REPORT FOR WEEK ENDING OCTOBER 5

AGRICULTURAL SUMMARY

Corn and soybean harvest is steadily gaining momentum in most regions of the state, according to the Indiana Agricultural Statistics Service. However, wet field conditions early in the week and rain delayed field activities in some areas. The first major frost occurred in most areas of the state last week. Corn harvest is 7 days behind last year's pace and 13 days behind average. Soybean harvest is 3 days behind last year and 8 days behind the average pace. Seeding of winter wheat, tillage of soils and baling hay were taking place on some farms last week.

FIELD CROPS REPORT

There were 4.9 **days suitable for fieldwork**. Seventy-eight percent of the corn acreage is **mature** (safe from frost) compared with 83 percent a year ago and 93 percent for the average. By area, 76 percent of the corn acreage is mature in the north, 83 percent in the central region and 73 percent in the south. Thirteen percent of the corn acreage is **harvested** compared with 20 percent last year and 28 percent for the average. **Moisture** content of harvested corn is averaging about 23 percent. Corn **condition** is rated 63 percent good to excellent compared with 27 percent last year at this time.

Eighty-eight percent of the soybean acreage is **shedding leaves** compared with 91 percent last year and 96 percent for the average. Sixty-six percent of the soybean acreage is rated as **mature** compared with 73 percent last year and 84 percent for the average. Nineteen percent of the soybean acreage is **harvested** compared with 27 percent last year and 40 percent for the average. **Moisture** content of harvested soybeans is averaging about 13.5 percent. Soybean **condition** is rated 50 percent good to excellent compared with 32 percent last year at this time.

Major activities during the week were preparing equipment for harvest, spreading fertilizer and lime, chopping stalks and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 10 percent excellent, 56 percent good, 25 percent fair, 7 percent poor and 2 percent very poor. Twelve percent of the **winter wheat** acreage is seeded compared with 24 percent last year and 24 percent for the average. Three percent of the winter wheat acreage has **emerged** compared with 4 percent last year and 4 percent for the average. **Tobacco** harvest is 91 percent complete compared with 92 percent last year and 94 percent for the average. Livestock are in mostly good condition.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
Percent				
Corn Mature	78	62	83	93
Corn Harvested	13	8	20	28
Soybeans Shedding Lvs	88	75	91	96
Soybeans Mature	66	42	73	84
Soybeans Harvested	19	9	27	40
Winter Wheat Planted	12	7	24	24
Winter Wheat Emerged	3	1	4	4
Tobacco Harvested	91	85	92	94

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excellent
Percent					
Corn	5	9	23	47	16
Soybean	7	12	31	42	8
Pasture	2	7	25	56	10

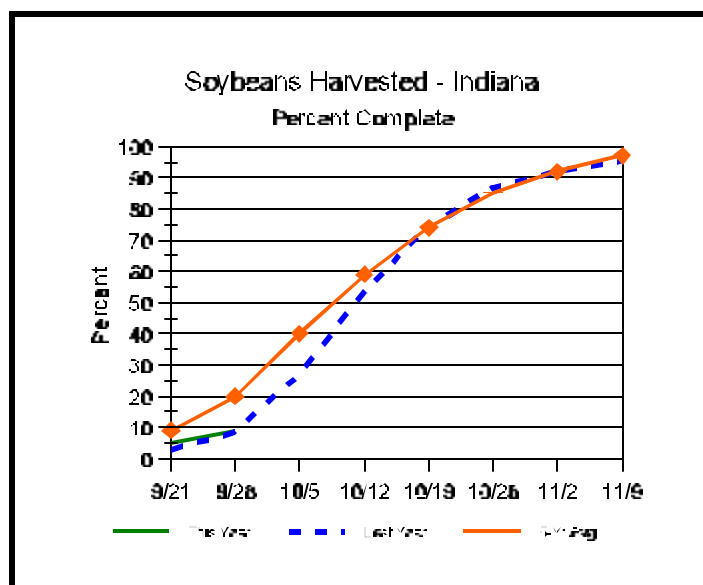
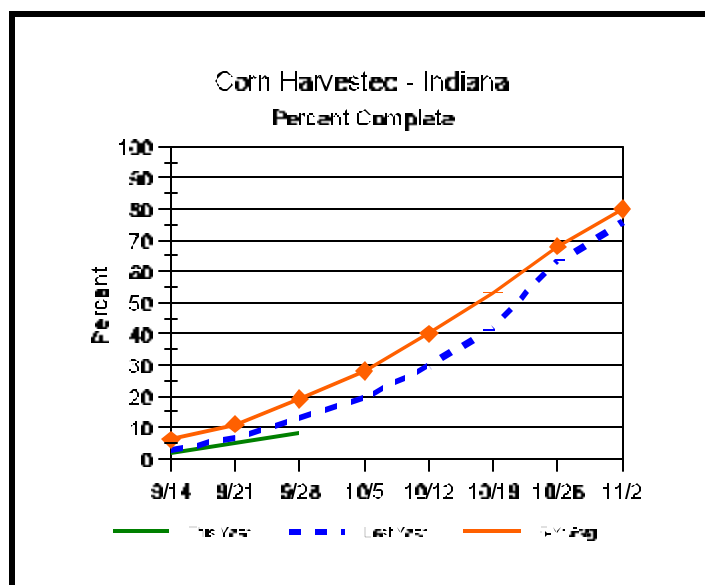
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This Week	Last Week	Last Year
Percent			
Topsoil			
Very Short	1	0	10
Short	6	7	30
Adequate	80	71	56
Surplus	13	22	4
Subsoil			
Very Short	4	5	24
Short	9	11	42
Adequate	78	71	34
Surplus	9	13	0
Days Suitable	4.9	3.8	5.4

CONTACT INFORMATION

--Greg Preston, State Statistician
--Bud Bever, Agricultural Statistician
E-Mail Address: nass-in@nass.usda.gov
<http://www.nass.usda.gov/in/index.htm>

Crop Progress



Other Agricultural Comments And News

Early Frost & Immature Corn Grain

Temperatures overnight dipped below 30F in parts of central and northern Indiana, approaching lethal levels for live corn plant tissue that could truly mark the end of the growing season for some fields whose grain was not yet mature. As of Monday's USDA crop progress report (Indiana Ag Statistics, 9/29/03), nearly 40% of Indiana's corn crop was not yet mature (kernel black layer) although virtually the entire crop was estimated to be at least to the dent stage of kernel development. What potential yield losses might occur in immature fields that suffered lethal cold temperatures?

Yield loss due to frost/freeze injury to immature healthy corn depends on 1) the stage of kernel development when the frost/freeze occurred and 2) the severity of the frost/freeze injury to the plants. The more immature the grain, obviously the more potential yield loss when frost/freeze injury occurs. Potential yield loss is also more severe when the whole plant is killed versus only leaf tissue.

Estimates of potential yield loss due to frost/freeze injury at several kernel development stages are (Carter & Hesterman, 1990):

- Soft dough stage ... 55% if whole plants killed ... 35 % if only leaves killed
- Full dent stage ... 41% if whole plants killed ... 27% if only leaves killed
- Late dent ... 12% if whole plants killed ... 6% if only leaves killed
(late dent is essentially equal to kernel milkline halfway down the kernel face)

These yield loss estimates can be tempered with the fact that overall plant health in many late-planted fields is not great to begin with. Late season leaf diseases, nitrogen deficiency, stalk rots, and European corn borer damage in particular have already compromised plant health in many fields and, consequently, yield potential. In other words, some yield loss has already occurred due to the leaf and stalk damage caused by these non-frost stresses. Further damage by frost/freeze injury to these stressed fields probably won't cause as much additional yield loss as it would to otherwise healthy plants.

Additionally, much of the state's immature corn crop acreage is located in southern Indiana

(Continued on Page 4)

Weather Information Table

Week ending Sunday October 5, 2003

Station	Past Week Weather Summary Data							Accumulation				
	Air			Precip.		Avg		April 1, 2003 thru				
	Temperature			Total		4 in		October 5, 2003				
	Hi	Lo	Avg	DFN	Total	Days	Soil Temp	Precipitation	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	62	28	47	-14	0.29	1	52	38.34	+15.80	69	2840	-240
Valparaiso_AP_I	57	32	45	-14	0.33	2		24.31	-0.31	70	2655	-158
Wanatah	58	29	45	-13	0.42	2	53	25.56	+1.81	75	2471	-211
Wheatfield	60	28	46	-13	0.43	2		34.67	+11.67	66	2710	-29
Winamac	58	27	45	-14	0.32	2	52	30.10	+7.25	73	2675	-148
North Central(2)												
Plymouth	58	28	45	-15	0.52	3		26.27	+2.81	73	2577	-393
South_Bend	56	30	45	-14	0.96	4		22.87	+0.09	70	2712	-71
Young_America	61	27	46	-13	0.23	1		33.56	+11.40	67	2831	-90
Northeast (3)												
Columbia_City	56	28	45	-13	0.39	2	49	30.02	+7.79	80	2601	-55
Fort_Wayne	58	31	46	-13	0.44	2		32.32	+12.02	67	2675	-245
West Central (4)												
Greencastle	61	26	45	-17	0.36	2		34.66	+9.01	69	2697	-602
Perrysville	64	26	48	-13	0.44	2	58	29.01	+5.00	65	3024	-43
Spencer_Ag	63	30	48	-12	0.21	3		31.46	+5.88	85	2998	-93
Terre_Haute_AFB	64	29	48	-14	0.03	2		25.61	+1.39	60	3160	-114
W_Lafayette_6NW	63	27	47	-13	0.19	1	53	31.05	+8.49	74	2907	-1
Central (5)												
Eagle_Creek_AP	61	33	48	-13	0.15	2		29.04	+6.44	66	3081	-163
Greenfield	60	30	46	-14	0.20	2		32.81	+8.13	76	2892	-229
Indianapolis_AP	61	32	48	-13	0.22	2		34.48	+11.88	69	3156	-88
Indianapolis_SE	60	29	47	-15	0.17	2		29.84	+6.79	67	2925	-314
Tipton_Ag	60	28	46	-13	0.26	2	57	36.17	+13.18	71	2665	-152
East Central (6)												
Farmland	59	28	46	-12	0.34	2	50	32.18	+9.87	67	2762	+12
New_Castle	59	27	44	-15	0.31	2		29.98	+6.36	63	2401	-418
Southwest (7)												
Evansville	68	33	52	-12	0.30	3		24.31	+1.48	68	3616	-146
Freelandville	64	34	50	-12	0.23	3		30.70	+6.92	65	3290	-93
Shoals	65	30	49	-13	0.43	5		30.55	+4.90	70	3229	-52
Stendal	68	35	51	-11	0.30	2		27.16	+1.66	58	3451	-93
Vincennes_5NE	66	33	49	-12	0.37	4	56	31.82	+8.04	88	3345	-38
South Central(8)												
Leavenworth	65	33	49	-12	0.33	3		29.25	+3.41	90	3286	+29
Oolitic	64	30	48	-13	0.13	2	53	30.36	+5.81	76	3084	-46
Tell_City	69	39	54	-10	0.33	3		28.12	+2.02	64	3777	+137
Southeast (9)												
Brookville	64	30	48	-11	0.12	2		27.20	+3.43	70	3115	+143
Milan_5NE	62	31	48	-12	0.33	3		34.03	+10.34	102	2990	+18
Scottsburg	66	31	49	-13	0.45	3		30.20	+5.73	80	3108	-261

DFN = Departure From Normal (Using 1961-90 Normals Period).

GDD = Growing Degree Days.

Precipitation (Rainfall or melted snow/ice) in inches.

Precipitation Days = Days with precip of .01 inch or more.

Air Temperatures in Degrees Fahrenheit.

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Early Frost & Immature Corn Grain (Continued)

where planting was so dramatically delayed by spring rains. Temperatures in southern Indiana this morning were more commonly in the low to mid 30's; not cold enough to cause major plant injury.

Web at <http://www.nass.usda.gov/in/crop-weat/2003/we3903.txt> [URL verified 10/2/03].

Related References

- Carter, P.R. and O.B. Hesterman. 1990. **Handling Corn Damaged by Autumn Frost (NCH-57)**. Purdue Univ. Extension Service. Available online at <http://www.agcom.purdue.edu/AgCom/Pubs/NCH/NCH-57.html> [URL verified 10/2/03].
- Indiana Ag. Statistics Service. 9/29/03. **Indiana Crop & Weather Report**. U.S. Dept. of Agriculture. Available on the

For other Corny News Network articles, browse through the CNN Archives at <http://www.kingcorn.org/news/index-cnn.html>.

For other information about corn, take a look at the Corn Growers' Guidebook at <http://www.kingcorn.org>.

**Bob Nielsen, Department of Agronomy,
Purdue University.**

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